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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,273	01/26/2001	Akihiro Shimotsu	A0-234 US	7981

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MOLEX INCORPORATED  
2222 WELLINGTON COURT  
LISLE, IL 60532

[REDACTED] EXAMINER

DOAN, JENNIFER

[REDACTED] ART UNIT      [REDACTED] PAPER NUMBER

2874

DATE MAILED: 11/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/771,273	<b>Applicant(s)</b> SHIMOTSU, AKIHIRO <i>M</i>
	<b>Examiner</b> Jennifer Doan	<b>Art Unit</b> 2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 22 August 2002.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,6 and 7 is/are rejected.
- 7) Claim(s) 3-5,8 and 9 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

#### **DETAILED ACTION**

Applicant's communication filed on August 22, 2002 has been carefully studied by the Examiner. The arguments advanced therein are persuasive and the rejections set forth in the previous Office Action are withdrawn. In view of further search, however, and the consequent discovery of relevant prior art documents, a new rejection is set forth below. This action is **not** made final.

The examiner agrees with the applicant that Takahashi does not teach a ferrule having a flange molded on a capillary surface. However, in view of further search, a relevant reference is found to explicitly show this feature; therefore, a new rejection is applied.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Specification***

2. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kurokawa et al. (U.S. Patent 4,479,910).

Kurokawa et al. disclose, Fig. 1, a ferrule (20) for fiber connector comprising a capillary (20A) having a pair of opposing end, an outer surface extending between the opposing ends as shown in Fig. 1 and a hole (22) extending between the opposing ends for insertion of an optical fiber (column 5, lines 25-37); a flange (20B) molded onto the capillary outer surface intermediate the capillary opposing ends such that the capillary outer surface proximate each opposing end is not covered by the molded flange as shown in Fig. 1; wherein the flange (20B) is molded from a plastic material (column 3, lines 14-17) and further wherein the flange (20B) has a cylindrical outer surface comprising a large diameter portion and a small diameter portion as shown in Figs. 1 and 5.

#### ***Allowable Subject Matter***

5. Claims 3-5, 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to disclose or reasonably suggest an apparatus and a method of making a ferrule comprising a recess and projection portions being formed at an interface between the capillary outer surface and the flange as recited in claims 3 and 8;

further wherein forming a projecting portion in the capillary outer surface and filling a space surrounding the projecting portion with a molding material during molding as recited in claim 9.

Claims 4 and 5 are dependent on the objected claim 3.

***Conclusion***

6. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kakii et al. (U.S. Patent 4,950,048) and Kobayashi et al. (U.S. Patent 6,358,874) disclose an optical connector ferrule. Yamaguchi et al. (U.S. Patent 6,435,731) and Nakajima et al. (U.S. Patent 6,431,783) disclose an optical connector ferrule having a flange molded to capillary.

8. Any inquiry concerning the merits of this communication should be directed to Examiner Jennifer Doan whose telephone number is (703) 308-6179. The examiner can normally be reached on Monday to Thursday from 6:30am to 4:00pm, first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick, can be reached on (703) 308-4819. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JD

November 8, 2002

  
John D. Lee  
U.S. Patent and Trademark Office